

REMARKS

Claims 1, 17, 34-52, 56, 60, 64, 68, 78-84 and 90-92 are presented for consideration, with Claims 1, 17, 34, 35, 48, 52, 56, 60, 64, 68, 78, 84 and 90-92 being independent.

Independent Claims 1, 17, 34 and 35 have been amended to further distinguish Applicants' invention from the cited art. In addition, Claims 90-92 have been added to provide an additional scope of protection.

Claims 1, 17, 34-37, 39-42, 48-52, 56, 60, 64 and 68 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Curry '604. In addition, Claims 38, 43-47, 78-84 are rejected under 35 U.S.C. §103 as allegedly being obvious over Curry in view of one or more secondary citations to Parker '228, Hayashi '845, Kelly '387, Broddin '137 and Slade '993. These rejections are respectfully traversed.

Claim 1 of Applicants' invention relates to an image recording method for performing recoding using a dot pattern corresponding to each gradation value, based on image data representing each pixel with a gradation value. The method includes an inputting step for inputting image data including gradation value information and position information relating to each pixel, a selection step for selecting one dot pattern based on gradation value information and position information indicated by each pixel of the input image data from a dot pattern table having a plurality of different dot patterns associated with gradation value and pixel position, and a recording step for recording an ink dot based on the selected dot pattern on a recording medium using a recording head. As amended, Claim 1 recites that the dot pattern table has a plurality of different dot patterns, each having the same dot number and a different dot arrangement, corresponding to the same gradation value, and the plurality of different dot patterns

corresponding to the same gradation value are associated with a plurality of pixel positions corresponding to a plurality of pixels arranged in a first direction substantially corresponding to a direction of arrangement of a nozzle of the recording head.

Independent Claims 17, 34 and 35 have been amended along the same lines as Claim 1 to recite that a dot pattern is selected from a dot pattern table storage unit based on gradation value information and position information, with the dot pattern table having a plurality of different dot patterns, each having the same dot number and a different dot arrangement, corresponding to the same gradation value.

Support for the amendments to these claims can be found, for example, in Figure 8 and the accompanying specification on page 41, line 9, et seq.

As discussed in the previous Amendment of April 16, 2004, the primary citation to Curry relates to an analytical halftone dot construction for a hyperacuity printer. In Curry, a dot area parameter calculator 28 is used to calculate a set of dot parameters defining the configuration of a halftone dot required to fill an area within a halftone cell, where the set of parameters corresponds to an intensity level. Curry provides for a plurality of halftone cells, each of which represents one intensity in an intensity range (see column 5, lines 5-6). As understood, the halftone cell is created with a halftone dot on the basis of a predetermined halftone dot pattern (see column 5, lines 10-13 and lines 24, 25). Although the halftone dot pattern in each halftone cell represents a different intensity value, each halftone cell contains only one dot pattern and thus only one halftone cell corresponds to an intensity level.

It is respectfully submitted, however, that Curry fails to teach or suggest selecting a dot pattern based on gradation value information and position information from a dot pattern table having a plurality of different dot patterns associated with gradation value and pixel

position, with the dot pattern table having a plurality of different dot patterns, each having the same dot number and a different dot arrangement corresponding to the same gradation value, as set forth in independent Claims 1, 17, 34 and 35.

Furthermore, in independent Claims 48, 52, 56, 60, 64, 68, 78 and 84, a dot pattern is selected based on gradation and position information from a dot pattern table with each dot pattern table including a plurality of dot positions. As discussed above, the halftone dot pattern in each halftone cell in Curry represents a different intensity value, with each halftone cell containing only one dot pattern. With respect to Claims 48, 56, 60 and 64, these claims provide for a dot pattern table storage unit for storing X , with $N > X$, dot patterns, and generating dot patterns correspond to $(N - X)$ predetermined gradation values. Claims 78 and 84 additionally feature a size of a dot pattern table corresponding to at least one specific color from among the stored dot pattern tables being smaller than sizes of dot pattern tables corresponding to colors other than the specific color. These features are also not taught or suggested by Curry.

The secondary citations to Parker, Hayashi, Kelly, Broddin and Slade fail to compensate for the deficiencies in Curry as discussed above. Therefore, without conceding the propriety of the proposed combinations of cited art, such combinations still fail to teach or suggest Applicants' claimed invention.

Accordingly, reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §102 and §103 are deemed to be in order and such action is respectfully requested.

Therefore, it is submitted that Applicants' invention as set forth in the independent claims is patentable over the cited art. In addition, the dependent claims set forth

additional features of Applicants' invention, and consideration of these claims is respectfully requested.

Newly cited Claims 90-92 are also submitted to be patentable over the cited art. As will be appreciated, these claims include, among other features, selecting one dot pattern based on gradation value information and position information from a dot pattern table having a plurality of different dot patterns associated with the gradation value and pixel position, with the dot pattern table having a plurality of different dot patterns, each having the same dot number and a different dot arrangement, corresponding to the same gradation value.

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. Copies of the listed documents are also enclosed.

Applicants certify under 37 C.F.R. §1.97(e)(1) that each item of information contained in the subject information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. Specifically, these documents were first cited in a European Search Report dated July 19, 2004, in a corresponding European patent application. A copy of the Search Report that issued on that related application is enclosed.

Accompanying this paper is a check for \$180.00 pursuant to 37 C.F.R. §1.97(c) and §1.17(p).

As will be appreciated, U.S. Patent No. 6,203,133 listed on the European Search Report is not included herewith as it was previously cited and enclosed in the Information Disclosure Statement of April 16, 2004.

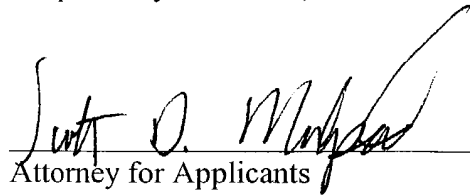
It is respectfully requested that the above information be considered by the Examiner and that an initialed copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

CONCLUSION

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott D. Malpede", is written over a horizontal line.

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